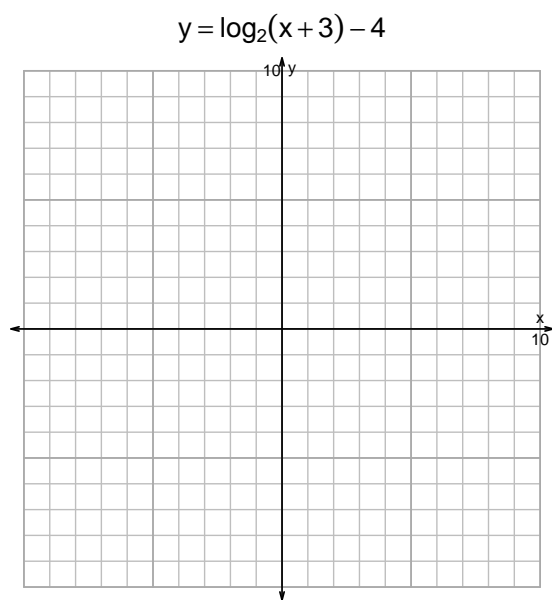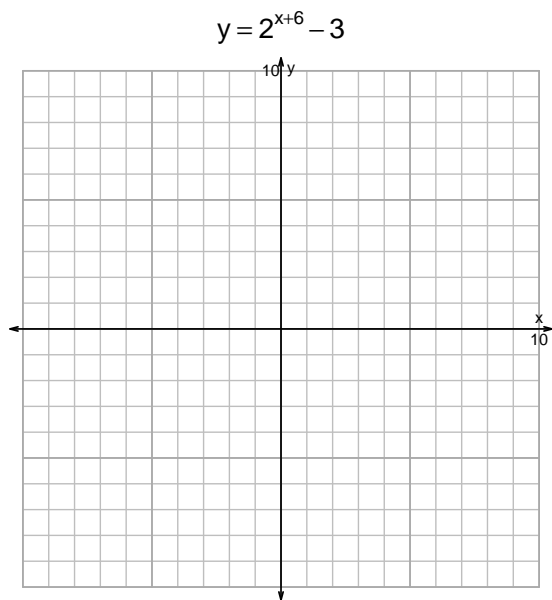Name: _____                                    Date: _____
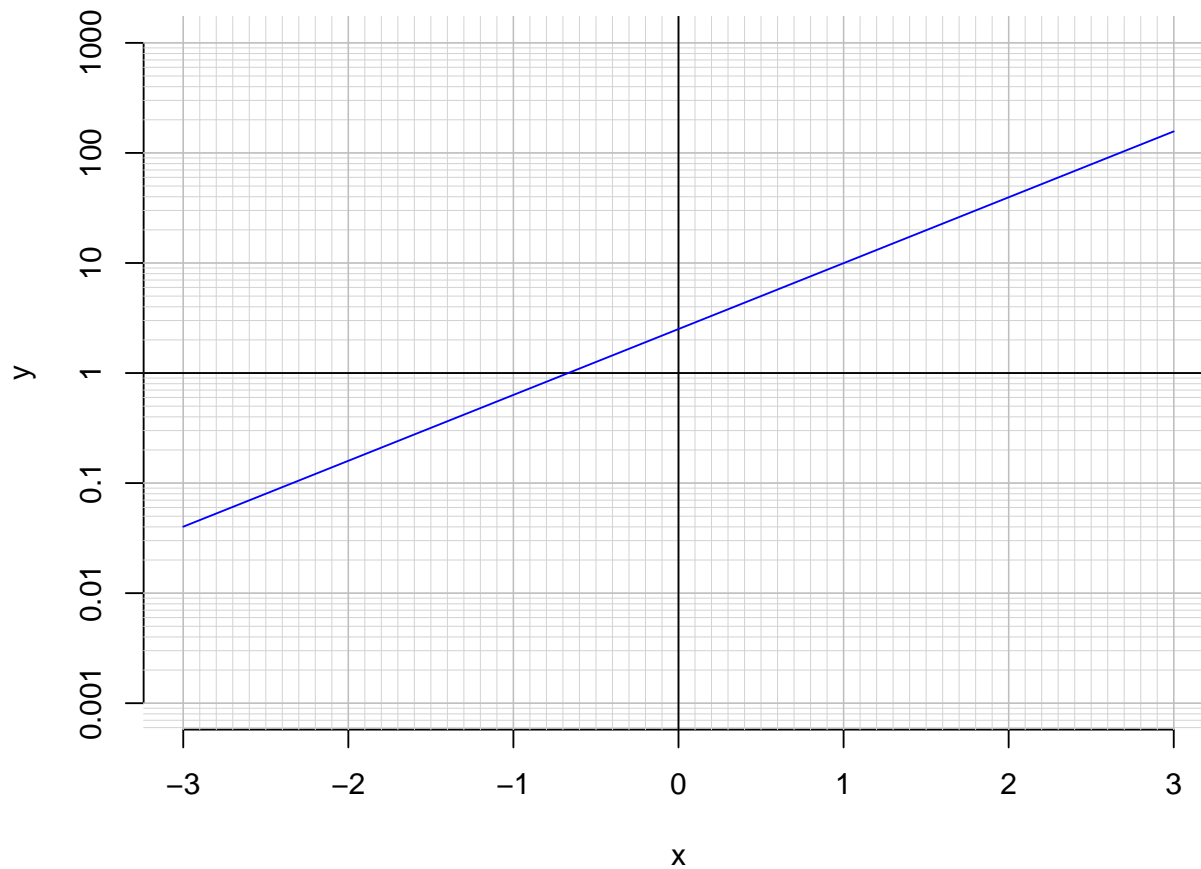
## s18QUIZ: EXP LOG (QUIZ v296)

1. Graph $y = 2^{x+6} - 3$ and $y = \log_2(x+3) - 4$ on the grids below. Also, draw any asymptotes with dotted lines.

$$y = 2^{x+6} - 3$$

$$y = \log_2(x+3) - 4$$

2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$-29 = \left(\frac{-3}{5}\right) \cdot 10^{-4t/7}$$

3. An exponential function $f(x) = 2.51 \cdot e^{1.38x}$ is graphed below on a semi-log plot.



a. Using the plot above, evaluate $f(-2.5)$.

b. Express $f^{-1}(x)$, the inverse of $f$.

c. Using the plot above, evaluate $f^{-1}(30)$.